

44-11-2

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Date 11-8-44

Subject: PRODUCT CONTAMINATION OF THE
AIR IN BLDG. 706A, 10-30-44 - 11-6-44

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By Geroge Koval

To K. Z. Morgan

OK

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FROM George Koval

Health-Physics

TO K. Z. Morgan

Health-Physics

PRODUCT CONTAMINATION OF THE AIR
IN NEBS. 706A, 10/30/44 - 11/4/44



Dust samples were collected by electrostatic precipitation. The rate of air flow through the precipitron was 11.5 GPM. Precipitation lasted 30 minutes. Samples were counted on Alpha Counter #7-712. Results were corrected for radium and thorium active deposit counts.

All concentrations of product found in the air were below the tolerance level of 2×10^{-10} μ gm/cc of air.

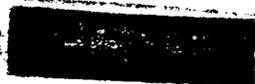
The results are listed on the following page.

G. Koval

OK/v

CLASSIFICATION CHANGE
 DATE 3-2-51
 FOR THE UNITED STATES COMMISSION
 W. A. Stevenson / H.F.C.
 CHIEF, RECORDS AND COMMUNICATIONS BRANCH





Location	Time and Date of Survey	Product Count	curies per cc of air	grams per cc of air
Room 22 - SE Hood	10/30/44 1:15	3	4.4×10^{-13}	6.9×10^{-12}
NE Hood	11/ 1/44 12:55	2	2.9×10^{-13}	4.5×10^{-12}
SE Hood	11/ 3/44 12:45	24	3.5×10^{-12}	5.5×10^{-11}
Room 32 - NW Hood	10/30/44 1:30	5	7.3×10^{-13}	1.1×10^{-11}
SE Hood	11/ 1/44 1:00	0	0	0
NW Hood	11/3/44 1:00	6	8.8×10^{-13}	1.4×10^{-11}
Room 34 - SE Hood	10/30/44 1:40	7	1.0×10^{-12}	1.7×10^{-11}
Out window	11/ 1/44 1:00	2	2.9×10^{-13}	4.5×10^{-12}
W Hood, N end	11/ 3/44 1:06	6	8.8×10^{-13}	1.4×10^{-11}
Room 57 - NW Hood	10/30/44 2:35	1	1.5×10^{-13}	2.3×10^{-12}
NW Counter hood	11/ 1/44 1:55	1	1.5×10^{-13}	2.3×10^{-12}
Over sink	11/ 3/44 2:15	5	7.3×10^{-13}	1.1×10^{-11}
Room 27 - NW Hood	11/ 1/44 2:10	7	1.0×10^{-12}	1.7×10^{-11}
Near floor at NW hood	11/ 1/44 2:40	0	0	0
E Hood, N end	11/ 3/44 1:25	5	7.3×10^{-13}	1.1×10^{-11}
Room 62 - N Hood	10/31/44 2:35	3	4.4×10^{-13}	6.9×10^{-12}
NW Hood	11/ 2/44 1:45	0	0	0
W Hood, NE end	11/ 4/44 1:15	2	2.9×10^{-13}	4.5×10^{-12}
Room 74 - N bench	10/31/44 2:27	9	1.3×10^{-12}	2.0×10^{-11}
Room 33-35 - NW Hood	11/ 2/44 1:36	0	0	0
Room 31 - W. Hood	11/ 3/44 2:45	5	7.3×10^{-13}	1.1×10^{-11}
Room 54 - W Hood, N end	10/30/44 2:10	7	1.0×10^{-12}	1.7×10^{-11}
W centrifuge	10/30/44 3:30	8	1.2×10^{-12}	1.9×10^{-11}
Room center	10/31/44 1:35	10	1.5×10^{-12}	2.3×10^{-11}
N Hood, W end	10/31/44 1:40	3	4.4×10^{-13}	6.7×10^{-12}
N Hood	10/31/44 2:00	13	1.9×10^{-12}	3.0×10^{-11}
W Hood, N end	11/ 1/44 2:00	7	1.0×10^{-12}	1.7×10^{-11}
W centrifuge	11/ 1/44 2:37	30	4.4×10^{-12}	6.9×10^{-11}
W Hood, N end	11/ 2/44 2:10	20	2.9×10^{-12}	4.5×10^{-11}
W Hood, S end	11/ 2/44 2:15	25	3.4×10^{-12}	5.3×10^{-11}
W Hood, N end	11/ 3/44 1:45	21	3.1×10^{-12}	4.8×10^{-11}
N. Hood	11/ 3/44 1:50	11	1.6×10^{-12}	2.5×10^{-11}
W Hood, N end	11/4 /44 1:15	17	2.5×10^{-12}	3.9×10^{-11}
Semiworks- Inside Cell 4	10/30/44 9:05	29	4.2×10^{-12}	6.6×10^{-11}
Door of Cell 5	10/30/44 9:07	5	7.3×10^{-13}	1.1×10^{-11}
Cell 6 - overhead tank	10/31/44 12:55	10	1.5×10^{-12}	2.3×10^{-11}
Door of Cell 4	10/31/44 12:55	12	1.8×10^{-12}	2.8×10^{-11}
Cell 3	10/31/44 3:07	26	3.8×10^{-12}	5.9×10^{-11}





<u>Location</u>	<u>Time and Date of Survey</u>	<u>Predict Count</u>	<u>curies per cc of air</u>	<u>grams per cc of air</u>
Semiworks - Cell 6 over centrifuge	11/1/44 12:45	6	3.8×10^{-13}	1.4×10^{-11}
- Door of Cell 4 & 5	11/1/44 12:45	7	1.0×10^{-12}	1.7×10^{-11}
- Cell 6 over centrifuge	11/2/44 1:50	49	7.1×10^{-12}	1.1×10^{-10}
- Cell 6 near centrifuge	11/3/44 8:40	14	2.0×10^{-12}	3.1×10^{-11}
- Cell 6	11/4/44 2:15	12	1.8×10^{-12}	2.8×10^{-11}
- Door of Cell 4	11/4/44 2:15	3	4.4×10^{-13}	6.9×10^{-12}

